



217/782-2113

OPERATING PERMIT

EPA Region 5 Records Ctr.



355912

PERMITTEE

Sherwin-Williams Company
Attention: James C. Jones
11700 South Cottage Grove
Chicago, Illinois 60628

Application No.: 88040014

I.D. No.: 031600FHI

Applicant's Designation: BOILER #1

Date Received: April 8, 1988

Subject: Cleaver Brooks Boiler

Date Issued: May 10, 1988 ✓

Expiration Date: May 6, 1993

Location: 11700 South Cottage Grove, Chicago

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of 2 boilers as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Emissions of particulate matter, nitrogen oxides and carbon monoxide shall not exceed 0.20, 4.22 and 0.84 tons/yr, respectively. These limits are based on standard emission factors, firing of natural gas at the maximum firing rate (6.28 million Btu/hr), and the maximum hours of operation indicated in the permit application.

Terry A. Sweitzer, P.E.
Manager, Permit Section
Division of Air Pollution Control

TAS:DAA:ds:4837H/30

DAA
cc: Region 1
h.w.



STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62706

**STANDARD CONDITIONS
FOR
OPERATING PERMITS**

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special permit condition(s).

1. The issuance of this permit does not release the permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or with applicable local laws, ordinances and regulations.
2. The Agency has issued this permit based upon the information submitted by the permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under 35 Ill. Adm. Code 201.207.
3.
 - a. The permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Agency and unless a new permit or revision of the existing permit(s) is issued for such modification.
 - b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.
4. The permittee shall allow any duly authorized agent of the Agency, upon the presentation of credentials, at reasonable times:
 - a. to enter the permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,
 - b. to have access to and to copy any records required to be kept under the terms and conditions of this permit,
 - c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,
 - d. to obtain and remove samples of any discharge or emission of pollutants, and
 - e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring or recording any activity, discharge or emission authorized by this permit.
5. The issuance of this permit:
 - a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are located,
 - b. does not release the permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the facilities,

CALCULATION SHEET

Facility Shewin-Williams Co
 Anal. Eng. DAA Date 04 08 88
 Rev. Eng. _____ Date _____

I.D. 03L 600 FHI
 PN 88 04 0014
 Date Rec. 04 08 88

Permit to operate 2 boilers

No flag. Not subject to NSPS/NESHAPS.

Firing rates: 6.28×10^6 BTU/hr max
 4.71×10^6 BTU/hr ave

Part = $.005(6.28) = 0.031$ #/hr max, 0.023 #/hr ave each
 $NO_x = .100(6.28) = 0.628$ #/hr max, 0.471 #/hr ave "
 $CO = .020(6.28) = 0.126$ #/hr max, 0.094 #/hr ave "

Annual (Max hrs 24/7/40)

Part = 0.10 TPy max, 0.08 TPy ave each
 $NO_x = 2.11$ TPy max, 1.58 " " "
 $CO = 0.42$ " " , 0.32 " " "

(Ave hrs 24/7/26)

Part = 0.08 TPy max, 0.05 TPy ave each
 $NO_x = 1.37$ " " , 1.03 " " "
 $CO = 0.28$ " " , 0.21 " " "

GRANT

Part ≤ 0.2 TPy
 $NO_x \leq 4.22$ "
 $CO \leq 0.84$ "

based on emission factors,
 max firing rate & max
 hrs of operation.

Added to TMS.



STATE OF ILLINOIS
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DIVISION OF AIR POLLUTION CONTROL
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62706

1-A
This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter III 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

APPLICATION FOR A PERMIT (A) <input type="checkbox"/> CONSTRUCT <input checked="" type="checkbox"/> OPERATE	FOR AGENCY USE ONLY I. D. NO. <u>031600 FHI</u> PERMIT NO. <u>88040014</u> DATE <u>4-8-88</u>
NAME OF EQUIPMENT TO BE CONSTRUCTED OR OPERATED <u>Cleaver Brooks 50 HP Boiler</u> (B)	

1a. NAME OF OWNER: <u>Sherwin-Williams Company</u>	2a. NAME OF OPERATOR: <u>Sherwin-Williams Company</u>		
1b. STREET ADDRESS OF OWNER: <u>101 Prospect Ave. N.W.</u>	2b. STREET ADDRESS OF OPERATOR: <u>11700 Cottage Grove Ave.</u>		
1c. CITY OF OWNER: <u>Cleveland</u>	2c. CITY OF OPERATOR: <u>Chicago</u>		
1d. STATE OF OWNER: <u>Ohio</u>	1e. ZIP CODE: <u>44115-1075</u>	2d. STATE OF OPERATOR: <u>Illinois</u>	2e. ZIP CODE: <u>60628</u>

3a. NAME OF CORPORATE DIVISION OR PLANT: <u>Chicago Emulsion Plant</u>	3b. STREET ADDRESS OF EMISSION SOURCE: <u>11700 S. Cottage Grove</u>			
3c. CITY OF EMISSION SOURCE: <u>Chicago</u>	3d. LOCATED WITHIN CITY LIMITS: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	3e. TOWNSHIP:	3f. COUNTY: <u>Cook</u>	3g. ZIP CODE: <u>60628</u>

4. ALL CORRESPONDENCE TO: (TITLE AND/OR NAME OF INDIVIDUAL) <u>J.C. Jones Engineering Coordinator</u>	5. TELEPHONE NUMBER FOR AGENCY TO CALL: <u>(312) 821-3151</u>
6. ADDRESS FOR CORRESPONDENCE: (CHECK ONLY ONE) <input type="checkbox"/> OWNER: <input type="checkbox"/> OPERATOR <input checked="" type="checkbox"/> EMISSION SOURCE	7. YOUR DESIGNATION FOR THIS APPLICATION: (C) <u>Boiler #1</u>

8. THE UNDERSIGNED HEREBY MAKES APPLICATION FOR A PERMIT AND CERTIFIES THAT THE STATEMENTS CONTAINED HEREIN ARE TRUE AND CORRECT, AND FURTHER CERTIFIES THAT ALL PREVIOUSLY SUBMITTED INFORMATION REFERENCED IN THIS APPLICATION REMAINS TRUE, CORRECT AND CURRENT. BY AFFIXING HIS SIGNATURE HERETO HE FURTHER CERTIFIES THAT HE IS AUTHORIZED TO EXECUTE THIS APPLICATION.

AUTHORIZED SIGNATURE(S): (D)

BY SIGNATURE _____ DATE _____ TYPED OR PRINTED NAME OF SIGNER _____ TITLE OF SIGNER _____	BY SIGNATURE <u>James C. Jones</u> DATE <u>3/25/88</u> TYPED OR PRINTED NAME OF SIGNER <u>James C. Jones</u> TITLE OF SIGNER <u>Engineering Coordinator</u>
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(A) THIS FORM IS TO PROVIDE THE AGENCY WITH GENERAL INFORMATION ABOUT THE EQUIPMENT TO BE CONSTRUCTED OR OPERATED. THIS FORM MAY ONLY BE USED TO REQUEST ONE TYPE OF PERMIT - CONSTRUCTION OR OPERATION - AND NOT BOTH.

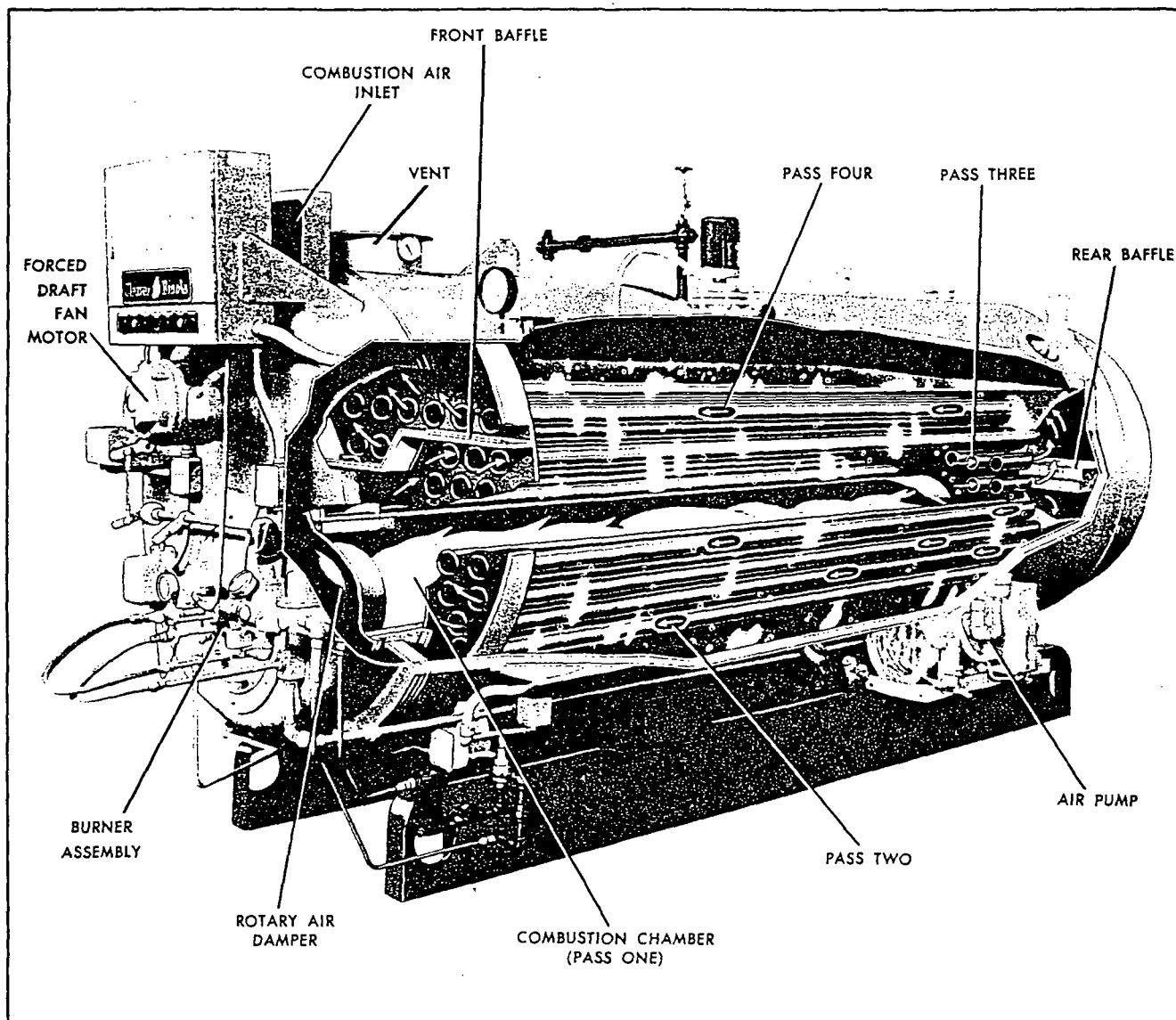
(B) ENTER THE GENERIC NAME OF THE EQUIPMENT TO BE CONSTRUCTED OR OPERATED. THIS NAME WILL APPEAR ON THE PERMIT WHICH MAY BE ISSUED PURSUANT TO THIS APPLICATION. THIS FORM MUST BE ACCOMPANIED BY OTHER APPLICABLE FORMS AND INFORMATION.

(C) PROVIDE A DESIGNATION IN ITEM 7 ABOVE WHICH YOU WOULD LIKE THE AGENCY TO USE FOR IDENTIFICATION OF YOUR EQUIPMENT. YOUR DESIGNATION WILL BE REFERENCED IN CORRESPONDENCE FROM THIS AGENCY RELATIVE TO THIS APPLICATION. YOUR DESIGNATION MUST NOT EXCEED TEN (10) CHARACTERS.

(D) THIS APPLICATION MUST BE SIGNED IN ACCORDANCE WITH PCB REGS., CHAPTER 2, PART 1, RULE 103(a)(4) OR 103(b)(5) WHICH STATES: "ALL APPLICATIONS AND SUPPLEMENTS THERETO SHALL BE SIGNED BY THE OWNER AND OPERATOR OF THE EMISSION SOURCE OR AIR POLLUTION CONTROL EQUIPMENT, OR THEIR AUTHORIZED AGENT, AND SHALL BE ACCOMPANIED BY EVIDENCE OF AUTHORITY TO SIGN THE APPLICATION."

IF THE OWNER OR OPERATOR IS A CORPORATION, SUCH CORPORATION MUST HAVE ON FILE WITH THE AGENCY A CERTIFIED COPY OF A RESOLUTION OF THE CORPORATION'S BOARD OF DIRECTORS AUTHORIZING THE PERSONS SIGNING THIS APPLICATION TO CAUSE OR ALLOW THE CONSTRUCTION OR OPERATION OF THE EQUIPMENT TO BE COVERED BY THE PERMIT.

<p>9. DOES THIS APPLICATION CONTAIN A PLOT PLAN/MAP: <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>IF A PLOT PLAN/MAP HAS PREVIOUSLY BEEN SUBMITTED, SPECIFY: AGENCY I.D. NUMBER _____ APPLICATION NUMBER _____</p> <p>IS THE APPROXIMATE SIZE OF APPLICANT'S PREMISES LESS THAN 1 ACRE? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO: SPECIFY <u>16.5</u> ACRES</p>	
<p>10. DOES THIS APPLICATION CONTAIN A PROCESS FLOW DIAGRAM(S) THAT ACCURATELY AND CLEARLY REPRESENTS CURRENT PRACTICE. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>	
<p>11a. WAS ANY EQUIPMENT, COVERED BY THIS APPLICATION, OWNED OR CONTRACTED FOR, BY THE APPLICANT PRIOR TO APRIL 14, 1972: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>IF "YES", ATTACH AN ADDITIONAL SHEET, EXHIBIT A, THAT: (a) LISTS OR DESCRIBES THE EQUIPMENT (b) STATES WHETHER THE EQUIPMENT WAS IN COMPLIANCE WITH THE RULES AND REGULATIONS GOVERNING THE CONTROL OF AIR POLLUTION PRIOR TO APRIL 14, 1972.</p>	<p>11b. HAS ANY EQUIPMENT, COVERED BY THIS APPLICATION, NOT PREVIOUSLY RECEIVED AN OPERATING PERMIT: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>IF "YES", ATTACH AN ADDITIONAL SHEET, EXHIBIT B, THAT: (a) LISTS OR DESCRIBES THE EQUIPMENT (b) STATES WHETHER THE EQUIPMENT (i) IS ORIGINAL OR ADDITIONAL EQUIPMENT (ii) REPLACES EXISTING EQUIPMENT, OR (iii) MODIFIES EXISTING EQUIPMENT (c) PROVIDES THE ANTICIPATED OR ACTUAL DATES OF THE COMMENCEMENT OF CONSTRUCTION AND THE START-UP OF THE EQUIPMENT</p>
<p>12. IF THIS APPLICATION INCORPORATES BY REFERENCE A PREVIOUSLY GRANTED PERMIT(S), HAS FORM APC-210, "DATA AND INFORMATION-- INCORPORATION BY REFERENCE" BEEN COMPLETED. <input type="checkbox"/> YES <input type="checkbox"/> NO</p>	
<p>APPLICATION FOR OPERATING PERMIT ONLY</p>	<p>13. DOES THE STARTUP OF AN EMISSION SOURCE COVERED BY THIS APPLICATION PRODUCE AIR CONTAMINANT EMISSION IN EXCESS OF APPLICABLE STANDARDS: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>IF "YES," HAS FORM APC-203, "OPERATION DURING STARTUP" BEEN COMPLETED FOR THIS SOURCE: <input type="checkbox"/> YES <input type="checkbox"/> NO</p>
	<p>14. DOES THIS APPLICATION REQUEST PERMISSION TO OPERATE AN EMISSION SOURCE DURING MALFUNCTIONS OR BREAKDOWNS: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>IF "YES," HAS FORM APC-204, "OPERATION DURING MALFUNCTION AND BREAKDOWN" BEEN COMPLETED FOR THIS SOURCE: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>
	<p>15. IS AN EMISSION SOURCE COVERED BY THIS APPLICATION SUBJECT TO A FUTURE COMPLIANCE DATE: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>IF "YES," HAS FORM APC-202, "COMPLIANCE PROGRAM & PROJECT COMPLETION SCHEDULE," BEEN COMPLETED FOR THIS SOURCE: <input type="checkbox"/> YES <input type="checkbox"/> NO</p>
	<p>16. DOES THE FACILITY COVERED BY THIS APPLICATION REQUIRE AN EPISODE ACTION PLAN (REFER TO GUIDELINES FOR EPISODE ACTION PLANS): <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>
	<p>17. WAS THIS OPERATION THE SUBJECT OF A VARIANCE PETITION FILED WITH THE ILLINOIS POLLUTION CONTROL BOARD ON OR BEFORE JUNE 13, 1972: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>IF "YES," CITE: PCB NUMBER(S) _____, DATE OF BOARD ORDER _____</p> <p>WAS CONSTRUCTION OR MODIFICATION OF EQUIPMENT, SUFFICIENT TO ACHIEVE COMPLIANCE WITH THE "RULES AND REGULATIONS GOVERNING THE CONTROL OF AIR POLLUTION" EFFECTIVE PRIOR TO APRIL 14, 1972, COMMENCED PRIOR TO APRIL 14, 1972: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>IF "YES," EXPLAIN IN DETAIL, AND IDENTIFY EXPLANATION AS EXHIBIT D.</p>
<p>18. LIST AND IDENTIFY ALL FORMS, EXHIBITS, AND OTHER INFORMATION SUBMITTED AS PART OF THIS APPLICATION. INCLUDE THE PAGE NUMBERS ON EACH ITEM (ATTACH ADDITIONAL SHEETS IF NECESSARY):</p>	
<p>TOTAL NUMBER OF PAGES _____</p>	



THE FOUR PASS CONSTRUCTION OF A TYPICAL CB GENERATOR

Combustion air enters through the air inlet. The forced draft fan forces air through the rotary air damper and the diffuser into the combustion chamber. The main fire tube or combustion chamber, constitutes pass one. Baffling allows gases to pass to the front of the generator only through pass two; here a baffle allows gases to pass to the rear of the generator only through pass three. From the rear the gases are forced through pass four to the vent.



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Statutes, 1979, Chapter 111, Section 10.29. Disclosure of this information is required under that section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

2-A

*DATA AND INFORMATION
FUEL COMBUSTION EMISSION SOURCE

*THIS INFORMATION FORM IS TO BE COMPLETED FOR A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED FOR THE PRIMARY PURPOSE OF PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN EMISSION SOURCE THAT DOES NOT FIT THIS DESCRIPTION, INCLUDING AN EMISSION SOURCE USING DIRECT HEATING, IS EITHER A PROCESS EMISSION SOURCE OR AN INCINERATOR.

1. NAME OF OWNER: Sherwin-Williams Company	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM OWNER): Chicago Emulsion Plant
3. STREET ADDRESS OF EMISSION SOURCE: 11700 S. Cottage Grove Ave.	4. CITY OF EMISSION SOURCE: Chicago, IL 60628

GENERAL INFORMATION

5. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE:		
6. MANUFACTURER: Cleaver Brooks	7. MODEL NUMBER: CB 200-150	8. SERIAL NUMBER: L-83993
9. AVERAGE OPERATING TIME OF EMISSION SOURCE: 48 HRS/DAY 7 DAYS/WK 26 WKS/YR	10. MAXIMUM OPERATING TIME OF EMISSION SOURCE: 48 HRS/DAY 7 DAYS/WK 40 WKS/YR	
11. PERCENT OF ANNUAL HEAT INPUT: DEC-FEB 50 % MAR-MAY 25 % JUN-AUG 0 % SEP-NOV 25 %		

INSTRUCTIONS

1. COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION.
2. COMPLETE THE APPROPRIATE FUEL SECTION OR SECTIONS. IF MORE THAN ONE FUEL IS FIRED OR IF THE CAPABILITY EXISTS TO FIRE MORE THAN ONE FUEL, THE ACTUAL USAGE OF FUELS AND THE RELATIONSHIP BETWEEN FUELS, SIMULTANEOUS FIRING, ALTERNATE FIRING, RESERVE FUEL, ETC., MUST BE MADE CLEAR.
3. EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.
4. FIRING RATES AND CERTAIN OTHER ITEMS REQUIRE BOTH AVERAGE AND MAXIMUM VALUES.
5. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201.

DEFINITIONS

AVERAGE - THE VALUE THAT SUMMARIZES OR REPRESENTS THE GENERAL CONDITION OF THE EMISSION SOURCE, OR THE GENERAL STATE OF HEAT PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:

AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD.

AVERAGE RATE - ACTUAL TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD, DIVIDED BY THE AVERAGE OPERATING TIME.

AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES.

MAXIMUM - THE GREATEST VALUE ATTAINABLE OR ATTAINED FROM THE EMISSION SOURCE, OR THE PERIOD OF GREATEST OR UTMOST HEAT PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:

MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATION FOR ANY TWELVE MONTH PERIOD.

MAXIMUM RATE - GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION.

MAXIMUM OPERATION - GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES.

2-B

GAS FIRING			
*11. ORIGIN OF GAS: <input checked="" type="checkbox"/> PIPELINE <input checked="" type="checkbox"/> DISTILLATE FUEL OIL GASIFICATION <input type="checkbox"/> OTHER LIQUID FUEL GASIFICATION <input type="checkbox"/> SOLID FUEL GASIFICATION <input type="checkbox"/> BYPRODUCT: SPECIFY SOURCE _____			
12. ARE YOU ON AN INTERRUPTABLE GAS SUPPLY: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF "YES", SPECIFY ALTERNATE FUEL: <u>Oil</u>			
13. ANNUAL CONSUMPTION: N/A SCF		* 14. HEAT CONTENT: 1050 BTU/SCF	
16. AVERAGE FIRING RATE: 4,710,000 BTU/HR		* 15. SULFUR CONTENT: N/A %BY WT. 17. MAXIMUM FIRING RATE: 6,280,000 BTU/HR	

*IF THE GAS FIRED IS NATURAL GAS, THESE ITEMS NEED NOT BE COMPLETED.

OIL FIRING	
18. TYPE OF OIL: GRADE NUMBER: <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 OTHER: SPECIFY _____	
19. ANNUAL CONSUMPTION: Not Used GALLONS	20. HEAT CONTENT: <input type="checkbox"/> BTU/LB <input type="checkbox"/> BTU/GAL
21. SULFUR CONTENT: %BY WT	22. ASH CONTENT: %BY WT
23. DIRECTION OF FIRING: <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/> TANGENTIAL <input type="checkbox"/> OTHER: SPECIFY _____	
24. AVERAGE FIRING RATE: BTU/HR	25. MAXIMUM FIRING RATE: BTU/HR

SOLID FUEL FIRING			
26. TYPE OF SOLID FUEL: <input type="checkbox"/> SUB-BITUMINOUS COAL <input type="checkbox"/> BITUMINOUS COAL <input type="checkbox"/> ANTHRACITE COAL <input type="checkbox"/> OTHER: SPECIFY _____			
27. ANNUAL CONSUMPTION: TONS		28. HEAT CONTENT AS FIRED: BTU/LB	
29. MOISTURE CONTENT AS FIRED: %BY WT	30. ASH CONTENT AS FIRED: %BY WT	31. SULFUR CONTENT AS FIRED: %BY WT	
32. TYPE OF FIRING: <div style="display: flex; align-items: flex-start;"> <div style="margin-right: 20px;"> <input type="checkbox"/> CYCLONE <input type="checkbox"/> PULVERIZED </div> <div style="margin-left: 10px;"> <input type="checkbox"/> WET BOTTOM OR <input type="checkbox"/> DRY BOTTOM, <input type="checkbox"/> HORIZONTALLY OPPOSED OR <input type="checkbox"/> OTHER: SPECIFY _____ </div> </div> <div style="margin-top: 10px;"> <input type="checkbox"/> SPREADER STOKER: % REINJECTION _____ <input type="checkbox"/> OTHER: SPECIFY _____ </div>			
33. AVERAGE FIRING RATE: BTU/HR		34. MAXIMUM FIRING RATE: BTU/HR	
SUBMIT COPIES OF THOSE PORTIONS OF COAL OR OTHER SOLID FUEL CONTRACTS WHICH SET FORTH THE SPECIFICATIONS OF THE FUEL AND THE DURATION OF THE CONTRACT. IF THE ACTUAL FUEL FIRED IS A BLEND OF SOLID FUELS, SUBMIT APPROPRIATE PORTIONS OF ALL FUEL CONTRACTS AND SET FORTH THE MANNER IN WHICH THE FUELS ARE BLENDED AND ACTUALLY FIRED. REFERENCE THIS INFORMATION TO THIS FORM.			

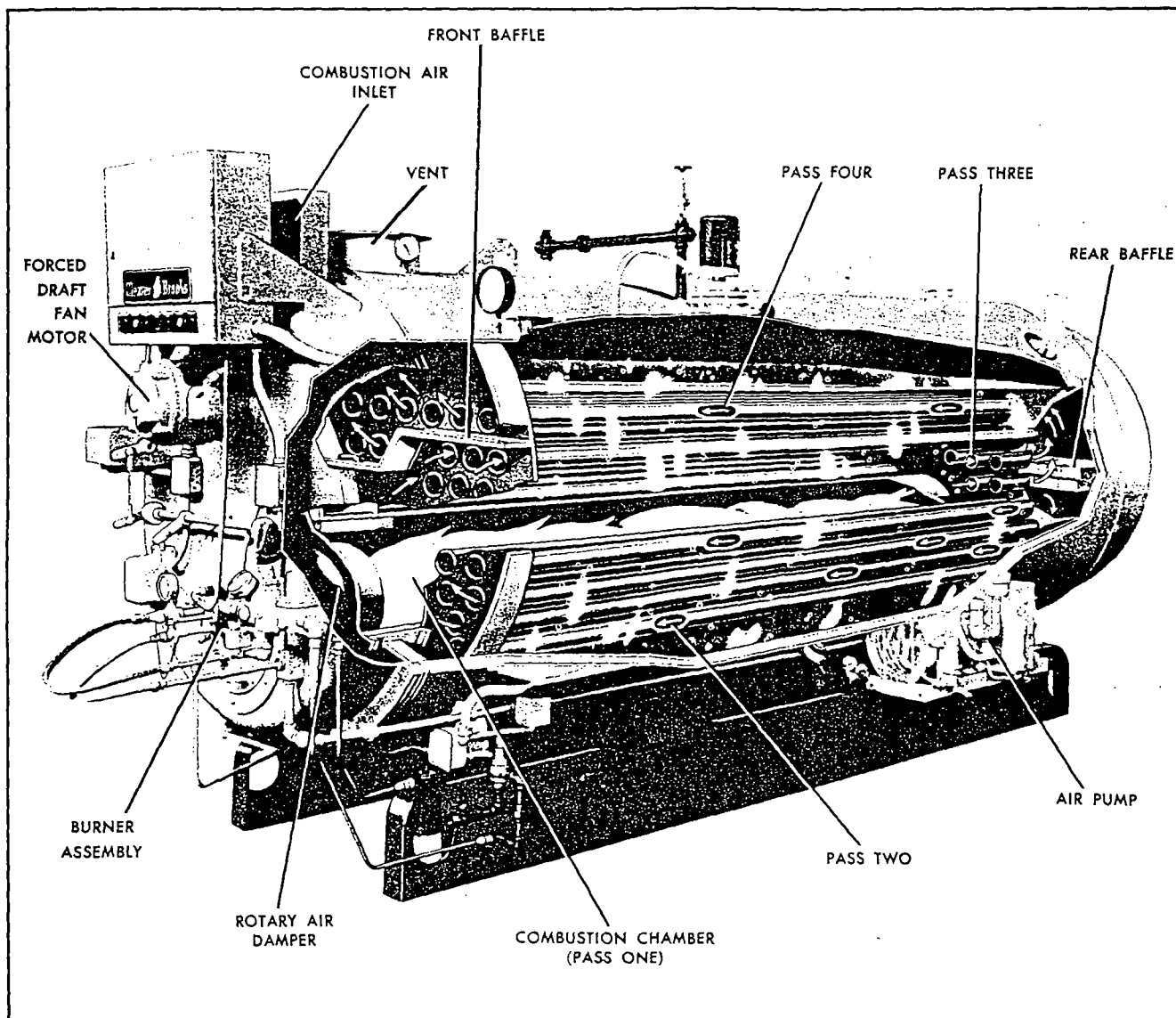
*EMISSION INFORMATION				
35. NUMBER OF IDENTICAL SOURCES (DESCRIBE AS REQUIRED):				
AVERAGE OPERATION				
CONTAMINANT	CONCENTRATION OR EMISSION RATE PER IDENTICAL SOURCE		METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE	
PARTICULATE MATTER	36a. GR/SCF	b. <input type="checkbox"/> LB/10 ⁶ BTU <input type="checkbox"/> LB/HR	c.	
CARBON MONOXIDE	37a. PPM (VOL)	b. <input type="checkbox"/> LB/10 ⁶ BTU <input type="checkbox"/> LB/HR	c.	
NITROGEN OXIDES	38a. PPM (VOL)	b. <input type="checkbox"/> LB/10 ⁶ BTU <input type="checkbox"/> LB/HR	c.	
ORGANIC MATERIAL	39a. PPM (VOL)	b. <input type="checkbox"/> LB/10 ⁶ BTU <input type="checkbox"/> LB/HR	c.	
SULFUR DIOXIDE	40a. PPM (VOL)	b. <input type="checkbox"/> LB/10 ⁶ BTU <input type="checkbox"/> LB/HR	c.	
MAXIMUM OPERATION				
CONTAMINANT	CONCENTRATION OR EMISSION RATE PER IDENTICAL SOURCE		METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE	
PARTICULATE MATTER	41a. GR/SCF	b. <input type="checkbox"/> LB/10 ⁶ BTU <input type="checkbox"/> LB/HR	c.	
CARBON MONOXIDE	42a. PPM (VOL)	b. <input type="checkbox"/> LB/10 ⁶ BTU <input type="checkbox"/> LB/HR	c.	
NITROGEN OXIDES	43a. PPM (VOL)	b. <input type="checkbox"/> LB/10 ⁶ BTU <input type="checkbox"/> LB/HR	c.	
ORGANIC MATERIAL	44a. PPM (VOL)	b. <input type="checkbox"/> LB/10 ⁶ BTU <input type="checkbox"/> LB/HR	c.	
SULFUR DIOXIDE	45a. PPM (VOL)	b. <input type="checkbox"/> LB/10 ⁶ BTU <input type="checkbox"/> LB/HR	c.	

*IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT, OR IF NATURAL GAS IS THE FUEL FIRED, ITEMS 36 THROUGH 47 NEED NOT BE COMPLETED.

**EXHAUST POINT INFORMATION			
46. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT:			
47. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.): nearest building 300ft NE of stack			
48. EXIT HEIGHT ABOVE GRADE: 57ft		50. EXIT DIAMETER: 2ft	
49. GREATEST HEIGHT OF NEARBY BUILDINGS: None FT		51. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY: 85ft FT	
AVERAGE OPERATION		MAXIMUM OPERATION	
52. EXIT GAS TEMPERATURE: 155 °F		54. EXIT GAS TEMPERATURE: 215 °F	
53. GAS FLOW RATE THROUGH EACH EXIT: 835 * ACFM		55. GAS FLOW RATE THROUGH EACH EXIT: 1255 * ACFM	

*IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT THIS SECTION SHOULD NOT BE COMPLETED.

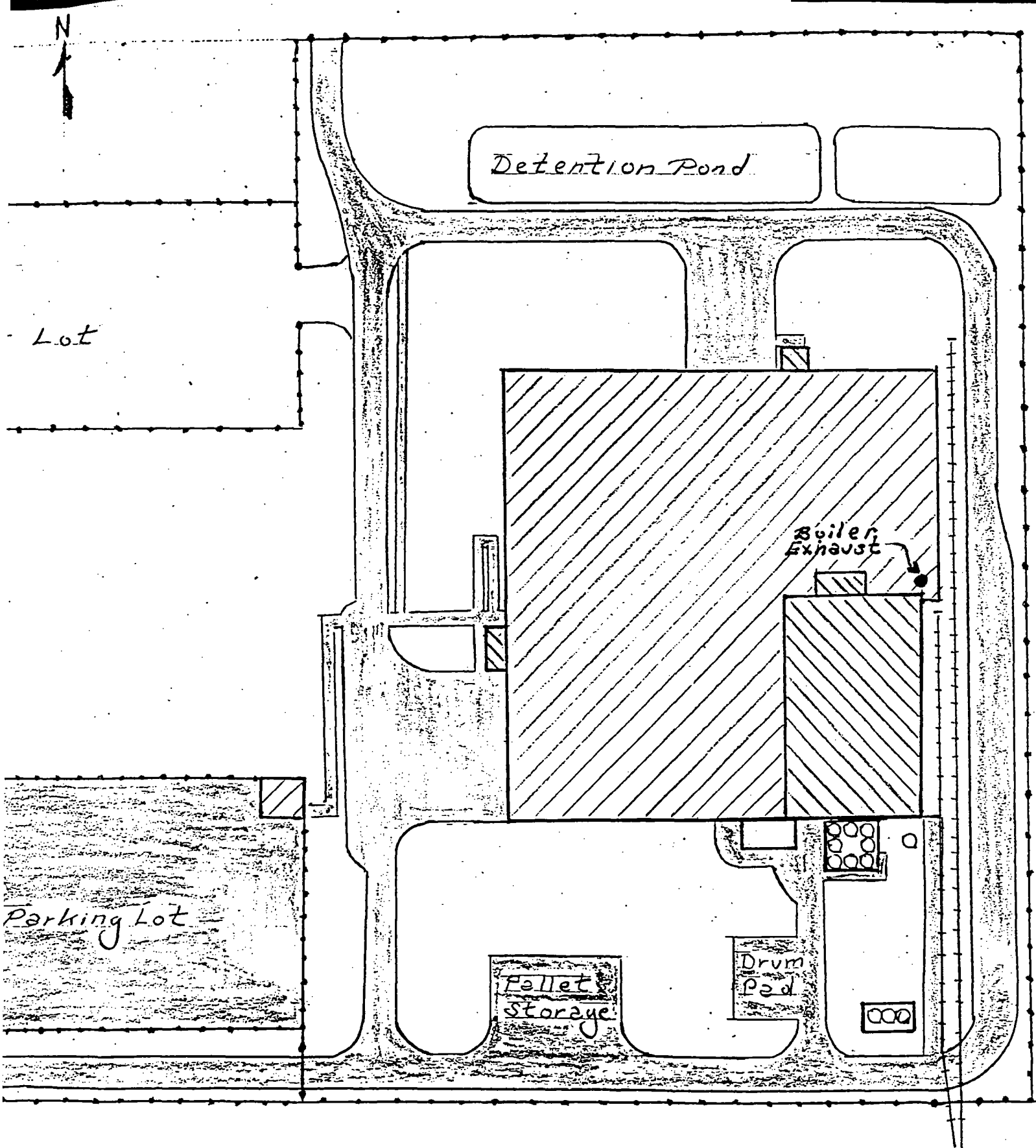
* Note: two boilers with 1255 scfm each vent through a common stack



THE FOUR PASS CONSTRUCTION OF A TYPICAL CB GENERATOR

Combustion air enters through the air inlet. The forced draft fan forces air through the rotary air damper and the diffuser into the combustion chamber. The main fire tube or combustion chamber, constitutes pass one. Baffling allows gases to pass to the front of the generator only through pass two; here a baffle allows gases to pass to the rear of the generator only through pass three. From the rear the gases are forced through pass four to the vent.





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